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AUTHOR Stubbs, Margaret L.
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ABSTRACT

This report focuses on the idea that the concept of teacher-as-researcher can and should be incorporated within the traditional teacher training curriculum. The discussion provides a description of a recent application of the notion of teacher-as-researcher within the format of a course designed to help would-be elementary school teachers fulfill state certification requirements. A brief description of the way in which the Educators' Forum operates is included because the course described in an adaptation of the Educators' Forum model. Appended are three references. (SI)

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Training Would-be Teachers to do Research: A Practical Account

Margaret L. Stubbs

To date, practicing teachers have rarely been involved in educational research except as informants or subjects for the research projects of others. This is, in part, because research has been defined as quite different and separate from practice, and in part, because practical knowledge has been devalued.

When teachers are disassociated from the process of research, their role as "experts" within the profession is undermined. Because teachers are not used to thinking of themselves as experts, they are often willing to follow an intermediary's judgment, rather than take the responsibility and risk involved in making their own informed judgments. When this is the case, teachers cannot act as "experts," or serve as influential resources within the field. The profession is impoverished because it cannot work on the most significant issues - those that grow out of teachers' practical knowledge, and are most likely to influence school practice.

The work of participants in the Educators' Forum, a seminar in which experienced teachers are supported in their efforts to conduct what we have termed practitioner research (Evans, Stubbs, Davis, & Duckworth, 1981: Evans, Stubbs, Frechette, Neely, & Warner, 1987) has demonstrated that with the appropriate stimulation, technical support and encouragement, practicing teachers do affirm the value of their own insights and participate effectively in educational research. This work serves as the basis for the notion that the concept of teacher-as-researcher can and should be incorporated within the traditional teacher-training curriculum.

The discussion that follows provides a description of a recent application of the notion of teacher-as-researcher within the format of a course designed to help would-be elementary school teachers fulfill state certification requirements. As background for this discussion, consideration is given first to the proposition that teacher-training programs should facilitate an acknowledgement of teachers as a source of knowledge about education and can do so by providing teachers-in-training with opportunities to participate in practitioner research. In addition, because the current application is an adaptation of the Educators' Forum, a brief description of the way in which the Forum operates is included.

Background

Teachers are undervalued as a source of knowledge about education. Unlike researchers, teachers are not recognized as educational experts in the culture at large, or even within their own field. Indeed, most teachers don't think of themselves as experts, in part, because the educational process itself deemphasizes articulating and trusting one's own judgments and reactions. Too frequently, when students are asked to do research, they are sent to the library, not the laboratory, to read about what others did. The research task is reduced to paraphrasing, to restating the facts discovered by others. Only rarely, and at the most advanced levels of our educational system, are students asked to comment on, evaluate or critique the findings of

others. Rarer still are opportunities to pursue original ideas. Original work is more often tolerated for the exceptional student, or for the scientist-in-training, but the important task for most is to learn how to fortify opinion with appropriate, referential padding from notable secondary sources.

Teachers, too, like students, have only limited support within their profession for thinking of themselves and acting as experts. Administrators who expect teachers to perform competently in the classroom nevertheless often challenge their opinions, for instance, about ordering particular supplies, classroom organization, or optimal group size. Frustrated that their own opinions seem to carry such little weight, some teachers, like the students described above, feel a need to bolster their own opinions by citing research which is supportive of their position in an effort to command the attention of their superiors (cf. Amabile & Stubbs, 1982). Unfortunately, this strategy does nothing to strengthen the credibility of the teacher, who, by using it, is appealing to a higher authority. In addition, for many teachers, such a strategy is ultimately impractical. There is not always time both to teach and to develop an articulate argument to support certain pieces of one's practice by delving into research reports which are neither easy to get nor easy to read.

Indeed, there are too few opportunities in teaching for teachers to identify and investigate with each other their own concerns about classroom practice. Faculty meetings often get bogged down by what many teachers consider secondary, though not unimportant, aspects of school life. Managerial matters, such as bus schedules, safety patrol, the schedule for outside or lunchroom duties, rules about children wearing hats or chewing gum or coming into the classroom before the start of school, fill the agenda.

Topics addressed in other professional meetings of the sort arranged by the administration in order to introduce staff to new teaching materials or techniques can, at times, catch the interest of some teachers, but more often than not, what the system is interested in addressing does not represent a high priority issue in many classrooms. As a result, some teachers grow to resent having to attend meetings in which they are the passive recipients of answers to problems or questions posed by others. Others can come to feel disengaged from the "larger issues," and as if the particulars of their own classrooms are of relatively little interest to anyone else. At worst, teachers can come to feel more and more isolated, not only from their peers, but from the initial excitement they felt about teaching.

When the concerns of teachers are not articulated and investigated, there are implications for the profession as well as for individual teachers. Teachers who are not able to inform the field cannot significantly influence its direction. Instead, the system is responsive to outsiders. Researchers who are often several steps removed from classroom practice discuss, define and evaluate educational theory and practice. A lack of fit between theory and practice is often the result.

The Educators' Forum

The Educators' Forum[1] is one program that assists experienced teachers in identifying and investigating their own questions and concerns about classroom practice, and in so doing, enables practitioners to claim and utilize their professional expertise for the benefit of themselves and the field at large. The Forum, led by Claryce Evans, is a group of teachers who meet for two hours every other week during the school year to design, carry out and interpret classroom investigations. The teachers attend voluntarily, and are neither paid a stipend, nor charged a fee for participation. Several years ago, the Forum became affiliated with the Harvard Teachers' Network, which has helped to announce the existence of the group to a wider audience, has assisted in the documentation of the sessions, and has provided a room for a meeting space. There is currently no other funding, including salaries for staff supporting the Forum's activities.

The immediate goal of the Forum is to provide an opportunity for participants to understand their own work better. Meetings are designed so that each person is helped to 1) identify an area of sufficient interest to merit her sustained attention, 2) recognize and 3) value what she already knows in relation to it, 4) state her implicit knowledge explicitly and coherently, 5) identify other information which is likely to be useful or interesting, 6) think of ways to gather that information and, later, 7) make sense of the new information and the new perceptions and ideas which develop from it.

At first, the facilitators bear the major responsibility for these tasks. Gradually, group members share in finding ways to help one another work on them. In the meetings, each person has a chance to present her ideas to the group for discussion. Initially, "presentations" involve attempts to define questions of interest. Usually 3 or 4 people have time to present at each meeting. In response to these presentations, the other members serve as advisors, asking questions to help the presenter clarify her thinking and define and take the next step in the investigation. The following kinds of questions serve to lubricate the discussion, and turn it time and time again back to the presenter for her comments:

1) What would you like to know about your classroom?

2) What is it about this question/issue which makes it important/interesting to you?

3) What do you mean by "responsible" (for example)? Can you think of a time when one of your students was "responsible'? Can you think of a time when someone was not "responsible"?

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[1]Portions of this section are drawn from Evans, C., Stubbs, M.L., Frechette, P., Neely, C., & Warner, J. (1987) Educational Practitioners: Absent Voices in the Building of Educational Theory. (Working Paper #170) Wellesley, MA: Wellesley College Center for Research on Women. (ERIC Document Reproduction Service No. SP 030 226 ED 294861)

4) What do you already know (about this question)?

5) What is still puzzling to you?

6) What other information would be useful/interesting?

7) What are some ways you might be able to find out?

8) What do you think might be a reasonable next step?

The participants are also encouraged to write for themselves and the group in order to enhance their own understanding of their questions.

To begin her work, each teacher is encouraged to identify something in her classroom about which she would like to know more. She begins, therefore, with a question related to her own practice and usually seeks answers in her own classroom. Because the question is something one cares about - because one's own work is on the line, a presenter may feel at risk in discussing it in depth in a group. Adhering to the following guidelines has helped in providing a supportive atmosphere in which teachers can do this difficult and risky work:

1) We seek to help each other obtain more information about our own classrooms, to better understand our classrooms. We do not attempt to suggest better teaching strategies.

2) When a teacher presents her work for discussion, we respond to her by trying to see the questions and issues from her point of view, and by helping her figure out what she wants to understand, not what we find most interesting or important.

3) We try to learn something, to answer some questions about our classrooms. In other words, we are task-oriented.

4) Each participant is asked to avoid extended discussions of issues or problems over which she has no control or influence.

5) Written notes of each session are regularly distributed to all participants and tape recordings made of each session are available to any participant on request.

6) Because teaching is personal and members of the group talk about some issues which are worrisome, discussions are confidential.

7) The "subjects" of the investigations are recognized as people too; they are respected and not treated as objects.

8) Each participant has "air time" on a regular basis.

Deliberately missing from the Forum, in sharp contrast with most seminars for teachers, is direct assistance for improving practice. The Forum operates on the assumption that there is no one best or most enlightened view of teaching to which all members need be committed. In the Forum, it is acknowledged that people work in quite different settings and have quite different views of teaching and learning. There is, therefore, no attempt to convince the teachers that they should use different teaching strategies or to teach them how to do so. The teachers are, in fact, discouraged from doing this for one another. The implicit message of advice giving is that someone else knows. The intended message of the Forum is that teachers are knowledgeable experts.

Teachers attending the Forum identify several positive outcomes of participating. Many mention that their practice is positively affected, and in particular, that the close observation encouraged by the project reveals new insights about what is happening in the classroom. Others mention changes in self-perception, noting that with an ability to articulate what they know, they come to value their own ideas and trust their own judgment. Finally, these teachers have taken a step towards becoming more influential in their profession by sharing their insights with others in the field. Several have shared their work locally with their peers, and others have presented their thoughts at both regional and national professional meetings.

Practitioner Research and Teacher-training

The success of the Forum inspired an application of its way of working within a traditional teacher-training program. The hypothesis guiding this application was that teachers will be more likely to assume positions of leadership within the profession and make significant contributions to the improvement of classroom practice if they are encouraged to think early on about the importance of practical knowledge rather than mid-way through their careers.

I was afforded the opportunity to do this work when I was hired by a local college to teach a semester-long course on the middle years (ages 6 through 12) of childhood offered within the college's traditional teacher training program. The course met once a week at night for 2 1/2 hours. In attendance were several post-graduate students who had taught before at other age levels or in private schools, a full-time, uncertified fourth grade teacher from a city school system, and one undergraduate majoring in early childhood education.

According to college policy, attendance at all classes was mandatory. Absences could be excused only with a physician's confirmation of illness. In addition, I was expected to give grades and the grading policy was to be detailed for students in the syllabus and distributed in the first class. The only guideline to be followed in preparing the grading policy was that the final exam could not count for more than 1/3 of the final grade for the course. I had free reign in determining other particulars, such as course content, texts used, number and kinds of papers and/or exams, within the general expectation by the college that I present to students information about the developmental issues confronting middle years children and

facilitate discussion about the implications of that information for educators and education. Finally, students who took this course were required by the college to participate in what was called a pre-practicum. The pre-practicum required students to attend 12 2 1/2 hour sessions in a classroom serving middle years children of any age. Within these sessions, the students and I, along with the cooperating classroom teacher, were free to structure activities.

A comparison of the Forum and the teacher-training setting reveals obvious differences. In the Forum, attendance was voluntary and participants were intrinsically motivated to attend. In the teacher-training course, attendance was mandatory, and participants were extrinsically motivated to attend on route to accomplishing the goal of state certification. Self-evaluation and intrinsic rewards were emphasized in the Forum, while the teacher-training course employed external evaluations (mine) and extrinsic rewards (grades). In the Forum, there was strong encouragement to read and write as opposed to the obligation to do so in the teacher-training course.

Given these basic differences, the greatest challenge I saw in adapting the Forum model for use in the teacher-training setting was finding a way to help students begin to think of themselves as experts and get some practice in trusting their own judgments within a setting where students as passive recipients of information and a system of external standards and rewards were prominently featured.

I used several strategies to try to meet that challenge. First, and most important, I viewed the pre-practicum as the key to unlocking the model for use within the course. Although other aspects of the course reflected an extrinsic orientation and a passive role for students, the pre-practicum offered students an opportunity for active learning about a related topic of their own choosing. Because students had to be in classrooms, I could ask them to think concretely about what they wanted to know about middle years children, or their classrooms, and to use these interests as the basis for classroom research projects. Thus, the access to the classroom required by the pre-practicum provided the students with an opportunity to engage in a bit of practitioner research while meeting the college's course requirement.

Because of this opportunity, I decided to split our class time into two parts. One half of the discussion would be devoted to students' questions and reactions to the imparted information; the other half would be devoted to a discussion of the students' research projects. I hoped that this format would both provide students with access to the required material and involve them in the process of thinking about what interested them about this age group, or teaching this age group, and in learning more about their interest at the same time.

The pre-practicum format facilitated a second general strategy - involving students in a general discussion of research. Because it would take a few weeks to secure the students' placements in classrooms, I knew that I couldn't count on the immediate involvement of students in practitioner research work per se. I decided to make use of the lag time at the beginning of the course to raise some general questions about the nature of expertise

and the nature of truth. I wanted to raise questions about how we know what we know, and why some methods of obtaining information are more credible in our society than others. In so doing, I hoped to encourage the students to adopt a critical attitude about the research readings to be presented in the course. If I was going to impart information to them, I wanted to arm them with some means of evaluating the methodology used to obtain that information, both in the course, and later in the field where they would be consumers of educational research. In addition, I hoped that they would come to appreciate that certain limitations attend all methods of inquiry, and further, that the traditional scientific method, with its own special set of assumptions and limitations, was only one among many useful methods. Finally, I hoped that students would entertain the notion that personal inquiry, a starting point of practitioner research, could be equally as compelling.

As a third strategy, I included the writings of teachers along with research reports from social scientists in my list of required readings. This strategy was intended to help students acknowledge the expertise of teachers. In addition to providing teachers' perspectives on middle years children, and thus enabling students to use teachers as a source of information, the teachers' writing also provided a model for the students as they struggled with their own writing and in the formulation of their own research projects.

A fourth general strategy was to try to balance external evaluation with self-evaluation. As one way of achieving this balance, I decided that I would, indeed, give and grade two exams, but that they would be take-home, open book, essay exams. In these exams, I offered students a choices of topics and to help them prepare their essays, I provided the questions well in advance of the due date, helped critique the questions ahead of time to help reduce confusion about essential points within each to address, and offered additional help to anyone who expressed an interest in structuring a specific outline. The essay questions themselves directed students to include information from the required reading as well as subjective commentary.

In addition to this graded writing, I required written work that was ungraded. I asked that students keep a log in which they wrote down reactions to the reading, or once their pre-practicum was under way, observations of things which interested them during their time in the classroom. I also required a written summary at the end of the semester of the research projects undertaken by the students. I responded to the logs and the research report in much the same way that I had responded to a Forum member's work - as an interested reader, asking for clarifying information when appropriate.

As a last effort to balance external and self-evaluation, I asked each student to offer some self-evaluative comments on the value or lack thereof of having been asked to think about and participate in practitioner research as a part of the course work.

Documenting sessions was also an important component of the course. In the Forum, all sessions were documented in two ways. We tape recorded each session, and built a library of tapes for members to consult whenever they wished to go back over a particular session in detail. In addition, a designated scribe, my role for a time, took notes at each meeting and prepared

a summary for distribution to all members on the occasion of the next meeting. The written notes proved to be especially useful in providing participants with ready access to their thoughts. Forum members were often surprised at having been so articulate: "I said that!" They responded positively to seeing their thoughts in print. Talk is so elusive -- spoken words slip into the air. Capturing talk in writing made the ideas stay. Capturing the talk in writing allowed Forum members access to their thoughts, questions and judgement. The session notes, a ready-made file of material to reconsider, not reinvent, proved to be invaluable to Forum members as a resource for their own writing. In the teacher-training course, I didn't use the tape recorder, but I did take notes and provide a summary from those notes of that portion of the discussion in which the students were describing their research projects.

These, then, were my general strategies in adapting the Forum model for use in the teacher training course. A next question is, how did it work? How did students react?

Initially, and not to my surprise, students seemed surprised to learn about the gap between research and practice, or, to put it another way, about connections between research and practice. The words of one student speak for many. She wrote:

> I find it interesting to read about the seeming adversarial relationship between educators and researchers. Although it is understandable, it hadn't occurred to me that this would be the case. The teachers are the clinicians and the researchers are the academicians. The teachers need to respond to immediate problems as they occur and can't afford the luxury of hypothesizing and setting up controlled experiments. They need to depend on their own experienced intuition and other teachers' experiences. It seems one should be required to teach before becoming a researcher to gain greater understanding.

The notion of teachers doing research, on the other hand, was a new idea for these students, one which I'm pleased to report, took hold. Catalytic in the process, as had been the case in the Forum, was reading the research work of other teachers, as this student explains:

> Reading this research done by teachers is making me realize that I may do this some day and I would [have] never thought I would.

And from another:

> This (report from a teacher about a particular child in the class) is the type of research I appreciate and can relate to. I need to hear other teachers' experiences because I can use some of their ideas and see if they work for me as well. Watching a particular student in a class of, say, 22 seems very difficult to me. How could I conduct the rest of the class as well? However, listening to these teachers' stories makes me want to try it and see. As the one teacher said, watching and writing about one child makes her more aware of the other children's needs as well.

A last but not least important statement from another student:

> I enjoyed this reading, especially the teachers' easy way of writing.

These comments led me to conclude that the initial format had caught students' interest. Although they were required to do practitioner research, their comments indicated that they were intrigued by the task. How did they progress with their research work?

When asked to do so, almost no one had trouble identifying a question of interest about middle years children or the classrooms that served them. The students were initially interested in the following topics:

> social development, how best to work with/interact with/address children as their role model
>
> relationships between children and how those relationships affect the child's learning ability
>
> development of children's friendships
>
> peer pressure, how it changes over time
>
> how to make a child want to learn and to make school an enjoyable place to be
>
> the parent's role in helping the teacher teach the child
>
> the arts and how they can be used in the classroom to promote and enhance intellectual development

As for Forum members, it was easier for students to identify a topic of interest than it was for them to be more specific about that interest. Just what about the development of children's friendships, for instance, did someone want to know? And, having narrowed that down, how could one go about collecting information to address that and other more specific questions?

I've noticed with interest that sometimes, in an effort to narrow the topic, there is a tendency for people who are beginning to do practitioner research to focus on one child and to adopt a case study approach. Several students in the class, for instance, were interested in a particularly worrisome student. One student, a shy person herself, was interested in how to help two of her more reticent pupils volunteer more during class time. Another was asked by her cooperating teacher to watch a particularly slow child who, at the beginning of the school year, was showing no signs of readiness for group work at his grade level. Close observation revealed some of this child's strengths. With information about these strengths, the classroom teacher was able to provide more opportunities for this child to succeed in school. Another student, who reached no conclusions at the end of the semester about her work, attempted to focus on two very troublesome boys. She described one boy as incorrigible. She felt some hope for the second boy,

who, after a time, become somewhat responsive to her attempts to provide him with extra attention. This student's investigation prompted us all to think about the very difficult situation of working with children we genuinely dislike or feel are hopelessly troubled and unreachable.

Perhaps the case study approach is a necessary first step for many practitioners who undertake classroom research. While many Forum members and some students found the case study a suitable approach, others who conduct classroom research have prefered investigations that are more broadly based. One student, for instance, was quite specific in her wish to avoid the focus on one child. She had been interested in the role of the arts in a school setting for some time, mostly as an interested observer of the role the arts played in her own children's education. In order to pursue this interest to the fullest within the context of the course, she sought a pre-practicum placement in a school in which the arts played a prominent role that was well stated for the public in the schools' goals. This student was interested in learning about how the arts functioned in the curriculum in a school which so clearly articulated the importance of the arts.

Aside from the difficulties of describing one's interest and gathering information about one's question, problems that Forum members also encountered, my students confronted one difficulty with which Forum members did not have to contend. My students had to negotiate for time in which to conduct their investigations with cooperating teachers who sometimes wanted to make use of them as helpers in specific classroom tasks. The time to talk to children about one's topic of interest, or even to simply observe, was particularly limited for some students. In spite of the demands of a busy classroom, full-time, in-charge teachers have a distinct advantage over teachers-in-training in terms of how and when they wish to conduct classroom investigations.

Finally, a comparison of the strengths and weaknesses of meeting once a week for one semester with meeting twice monthly over the course of a school year reveals costs and benefits associated with both formats. In some ways, asking students to summarize work in progress at the end of the semester was premature because by semester's end, many of them had only just started with actual investigation. There was not time to do all that they had wanted to do. It takes a good bit of time, as experience from the Forum has shown, for people to formulate a specific plan for one's research. In addition, the plan for the research evolves in response to the information gathered.

On the other hand, because time was precious, we used it well. The time constraint and the obligation to come up with a finished product did help some students get specific, and contributed to my playing a more directive role as facilitator in this setting as compared with my role in the Forum. A slightly more demanding format in the Forum might have been helpful to some Forum members who, at times, were bogged down by their own lack of initiative.

As I mentioned earlier, at the semester's end I asked students to comment on their experience of conducting classroom research within the context of the course. One of my most articulate students concluded that coordinating a classroom research project within a course on child development

had been an efficient method of learning for her for several reasons. Among these she mentioned that as a result of involvement in the research work, she came to a fuller understanding of educational research. She explains:

> It was first necessary for me to come to a practical understanding of what is meant by educational research. I was accustomed to thinking of research in the medical/nursing field where 'hard data' was more effective in relieving a patient's pain. . . Through the readings . . . and through the class discussions. . . I began to understand research as a pursuit of knowledge which involved a process of selection of a topic, development of questions about the topic, attempts to answer them through observation and active personal involvement, and finally refining, evaluating and interpreting the findings and presenting this in written form.

Clearly for this student, participation in research had afforded her personal access to its use. In addition, for this student, the research component of the course helped her relate to and better understand the developmental theory studied in the course content. Finally, she notes that in her case, the research process led to reflection, personal growth, stronger commitment to the thesis underlying her particular investigation, to increased practical knowledge (in regard to her topic, how to help children stage a play) and to a commitment to conduct similar investigations in the future.

At the other end of the spectrum was this comment from someone who struggled to express herself:

> Among the many things I got out of this class is the courage to write. The writing experience has taken the grudging out of writing!

The least experienced of the group said:

> Doing this research was very helpful to me. I found out that first impressions of children should not be taken to represent how children are in all aspects. When I am a teacher, I will certainly do this kind of close observing of my students. What I find out could be helpful when having other students like the student I have already researched.

And here is a final testimony:

> Observing this child and others in the class was a useful experience. If time permitted, I would keep journals on all the children in my class in order to see progress clearly as I have with M_____. I love watching and working with kids and I enjoy writing the observations. I find I learn a lot about my own interests in children through writing an experience over again.

My own conclusion about having asked teachers-in-training to try their hands at research is that it worked, in spite of the apprehensions I had about the possible negative impact of external constraints on the Forum model, which is grounded in self-discovery and self-direction. Although initially unfamiliar with assuming the role of expert, or acting out that role by participating in classroom research, the students in this course developed an interest in the idea of doing research, were able to so some, had positive reactions to having done so, and planned to pursue classroom research in the future.

Depending on their persistence, and on the opportunities available to them to continue to do this work, these students might share their discoveries with a wider audience. One has already presented her work at a teacher-researcher conference. Others may write, or try to set up similar discussion groups in the schools in which they will go to teach. Additional reinforcement of the notion that teachers are experts, provided, for instance, by more opportunities to participate in classroom research within teacher-training course work, will no doubt increase the probability of this happening.

Undergraduate social science majors are expected to become experts. They are urged to master the methodological tools of their trade and to participate in original work. Why should our expectations be any less for teachers-in-training? Our teacher-training programs can and should facilitate the acknowledgement of teachers as a source of knowledge about education. The work described in this paper, though preliminary, indicates that would-be teachers, like the practicing teachers who participated in the Forum, make good use of the opportunity to learn directly and early-on about their own expertise, and can develop a personal methodology for articulating and refining what they know. Having acquired these skills, and the perspective that their insights are valuable, these students are in a good position to make significant contributions in the improvement of classroom practice in the future. Practitioners who are able to acknowledge their own expertise, enrich and strengthen our profession. Once articulated, practitioners' knowledge can be shared more widely. When teachers' thoughts become accessible for consideration in all discussions of educational matters, decision making will be more informed, and policy changes more effective.

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